

**REMARKS**

This is in response to the Examiner's Report of 08/10/2007

In the claims, Claim 19 has been substantially rewritten as a consequence of the Examiner's comments and objections.

Claim 19 defines a rectangular framework having side and end members (sill 12, lintel 14) and a plurality of pairs of load-bearing strut members (22) extending between said framework end members ....in load-bearing relation between said framework end members.

The Leung (publication US 2002/0046514) shows a structural shear panel unit, used to overcome the lack of shear strength normally present in a wall section having provision for a window, wherein a central opening is provided by means of angled bracing members (e.g. Figs 3 & 4), and wherein Figure 1 shows a window opening supported by corner brace members. Leung's brace members do not extend between his sill and lintel, but serve simply as cross-braces, to resist lateral deformation of his framework, under transverse sharing loads. It will be observed that Leung's brace members are inclined from the vertical at angles of 45 degrees or greater, thus providing no greater than a 50% component of their buckling load capacity to resist vertical loading. Furthermore, where Leung's individual shear struts are connected with each other, they also are connected by way of metal toothed plates (Para 0034), which are also secured to the frame side members and effectively preclude effective transfer of downward loading between adjoined shear members, in contrast to the operation of the subject thrust members of the present invention, which efficiently transfer downward compressive loading upon the lintel 14 to the sill 12.

As previously stated, all of Leung's shear members are short separate brace members, each being a multiple thickness unit, to provide the requisite unit stiffness, for the purpose of endowing the framed unit with the required **shear strength** reinforcement.

Leung's diagonal braces are discontinuous, and secured to the outer frame by his toothed plates, so that it is not possible for them to operate as contiguous strut members and effectively transfer compressive loads from his top frame member to his bottom frame member.

Careful reading of the Leung reference should make it abundantly clear that the primary common elements of Leung and the present invention are the surrounding frames of the respective structures. The interior elements of the respective frames bear no structural or functional similarity with each other.

Dependent claims 2-18 have been further amended to better distinguish over the cited references.

Giving further consideration of the Kirk, Cable and Griffin references:

The Kirk (US 5,210,990) reference does not address the defects of Leung. Also, the wooden C-channel of Kirk is clearly incapable of use in the manner of the present invention, where Kirk's C-channel (Col 3 lines 4-7) "provides perfect straightness of the components. Warping and twisting of standard lumber are eliminated."; and his use of glue per se has no novelty, being merely for the purpose of securing the members of a taped, bevel joint, being applied internally of the corners of his C-channel, and not for the purpose of external application for attachment of deformable struts to adjoining structural members, as in the present application, to preserve the slender strut members against transverse warping that might arise due to their flexible nature. Kirk uses glue internally to secure the bevel joints of his rigid C-channel, and not for attachment of strut segments to extraneous structural members, as in the present invention.

The Cable (US 4,325,054) channeled metal studs are shown in use in the orthodox

stud/frame fashion as straight, rectilinear load bearing members. Additional cross-brace members are used in order to reinforce the Cable structure. There is no teaching to lead one skilled in the art to use the studs of Cable in the structure of Leung, and such action would be entirely retrograde.


Griffin (US 6,263,628) shows the use of panels with a slab foam core and C-stud side members to receive re-bar, the panel having a top recess for the positioning of re-bar and the pouring of a cement structure. There appears to be no teaching by Griffin (Col 6 lines 15-25) of the use of the foam core 12 to "resist lateral deformation of said studs", as referred to by the Examiner. This reference is dealt with in more detail in the present Declaration by the Applicant.

The other prior art made of record does not appear to redress the shortcomings of Leung as an anticipation of this invention, as now presented in the claims.

The enclosed Declaration by the present inventor further addresses the deficiencies of the above-discussed prior art, which taken individually or in combination fail to anticipate or make obvious the present invention.

Consideration of the amended claims with a view to their allowance is requested.

Respectfully submitted,

  
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